Neu-X303

Edge Computing System
Powered by 12th Gen Intel® Core™ Processor

Main Features

- 12th Gen Intel® Core™ (Alder Lake - PS) processor SoC
- 4 x 4K@60Hz display output, DP, HDMI 2.1 and 2 x USB 3.2 Type-C
- Dual 2.5G LAN ports, 4 x USB 3.2 and 2 x USB 3.2 Type-C ports for easy connection
- Onboard M.2 2280 Key M with PCIe signal for storage modules
- Onboard M.2 2230 Key E for optional Wi-Fi modules
- Compact design
- 12V DC in

Product Overview

Powered by the latest 12th Gen Intel® Core™ (Alder Lake–PS) processor, the Neu-X303 series edge computing system can handle very rich multimedia contents. With Intel® processor's low power consumption and new Intel® Iris® Xᵉ graphics, the platform delivers powerful graphics offering stunning visuals for compelling 4K content creation and media playback. In addition, the Neu-X303 series supports display output by HDMI and DP ports with flexible integration for various peripherals such as touchscreen displays, scanners, readers, and many more. Neu-X303 is a compact edge computing system with ample IOs including 2 LAN ports, 4 USB ports, and 2 USB Type-C ports to support intelligent vending machine, self-service checkout machine, AI facial recognition, or digital transit information signs. With enhanced performance, it is also ideal as a visual edge computer delivering advertising, hospitality, and brand promotion applications in an all-new immersive experience.

Specifications

CPU Support
- Intel® Core™ i7-1265UL, 10 Core, 1.8GHz, 12M Cache
- Intel® Core™ i7-1255UL, 10 Core, 1.7GHz, 12M Cache
- Intel® Core™ i5-1245UL, 10 Core, 1.6GHz, 12M Cache
- Intel® Core™ i5-1235UL, 10 Core, 1.3GHz, 12M Cache
- Intel® Core™ i3-1215UL, 6 Core, 1.2GHz, 10M Cache

Chipset & Memory
- SoC (codenamed Alder Lake-PS)

Main Memory
- 2 x 262-pin DDR5 SO-DIMM, supports non-ECC, un-buffered memory
- up to 64G

Graphics & Display
- Intel® Iris® Xᵉ graphics engine
- 1 x DP, support 4096 x 2304@60Hz
- 2 x DisplayPort over USB Type-C, support 4096 x 2304@60Hz
- 1 x HDMI 2.1, support 7680 x 4320@60Hz

I/O Interface-Front
- 1 x Power button
- 1 x HDD LED

I/O Interface-Rear
- 2 x RJ45 Intel® 2.5G Gigabit LAN port
  - 1 x Intel® I225-LM
  - 1 x Intel® I225v
- 1 x DP
- 1 x HDMI 2.1
- 4 x USB 3.2
- 2 x USB Type-C
- 1 x 12V DC input
- 2 x Antenna hole for Wi-Fi

I/O Interface-Internal
- 1 x USB 2.0 header
- 1 x RS232 header (9-pin)
- TPM 2.0 onboard

Storage
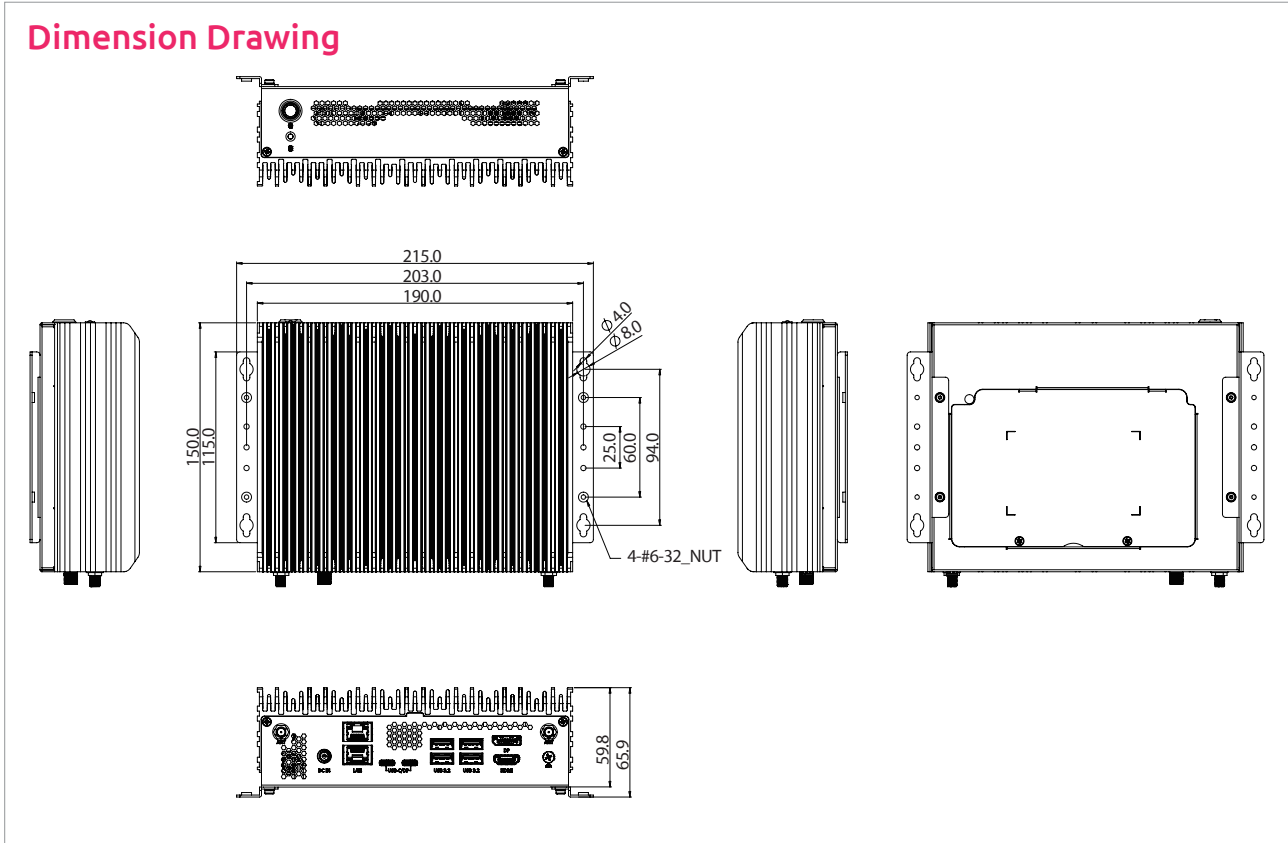- 1 x M.2 2280 Key M (PCIe x4 only), support optional storage modules

Expansion
- 1 x M.2 2230 Key E (PCIe x1), support optional Wi-Fi modules

Power Requirements
- Power input: 12V DC

Edge Computing System

NEXCOM

Dimension Drawing

Environment

- Operating temperature: 0°C to 50°C, ambient with 0.7m/s air flow
- Storage temperature: -40°C to 80°C
- Humidity: 10 to 95% (non-condensing)
- Shock protection: 50G peak acceleration, 11ms according to IEC-60068-2-27
- Vibration protection:
  - Random: 2G rms@5~500Hz, IEC60068-2-64
  - Sinusoidal: 2G@5~500Hz, IEC60068-2-6

Certification

- CE (EMC EN55032+EN55035)
- FCC Class A (EMI part 15B)

Dimensions

- 190mm (W) x 150mm (D) x 59.8mm (H) (without wall mount bracket)

Operating System

- Windows 10 21H2/Windows 11 21H2/Linux

Ordering Information

- **Neu-X303 (P/N: 10W10X30301X0)**
  Socket LGA1700,12th Gen Intel® Core™ i7/i5/i3 processor compact system, 12V DC